Globalization

Why are so many smart people such ardent advocates of globalization? Mainly, it is because **globalization** results in more efficient use of resources, resulting in faster rates of global economic growth. But there are other consequences, also intended: (1) an increase in international competition, in which countries must compete against each other for a share of global markets; (2) more intense national specialization according to the dictates of competitive (not comparative) advantage; (3) worldwide enforcement of "trade-related intellectual property rights"; and (4) control over local and national affairs by an international institution. Empirical evidence suggests another important consequence, an unintended one: an increased concentration of wealth within and between countries. It is this last consequence, perhaps, that has sparked the strongest opposition to globalization.

In this chapter we look at each of these consequences in a bit more detail within the context of the policy goals of ecological economics: efficient allocation, just distribution, and sustainable scale.

Efficient Allocation

Advocates of globalization claim that free trade is efficient, producing the much-touted "gains from trade." But efficiency depends on a number of critical assumptions and conditions, including these:

1. There must be a large number of nearly identical firms.
2. Information must be relatively freely shared.
3. There must be strong incentives to internalize costs.

Are the conditions for efficient production being met? We address this question for each condition listed above. We also ask whether

globalization maintains the opportunity for satisfying employment, and the role that opportunity plays in enhancing human welfare.

Perfect Competition vs. Transnational Corporations

The assumption of perfect competition, which requires a very large number of nearly identical firms, is a cornerstone of neoclassical economic theory. Perfect competition weeds out the inefficient and ensures the efficient allocation of resources within both national and international markets.

Globalization forces firms to compete against other firms worldwide. However, in general, only very large businesses have the resources to enter foreign markets. WTO rules actively forbid countries from promoting national small businesses if this can be construed as discrimination against large foreign corporations. Large corporations with economies of scale, or willing to accept low profits in an effort to gain market share, can easily underprice local businesses and either bankrupt or acquire them, thereby reducing the total number of firms. In fact, global mergers and acquisitions have been most intense in the areas of financial services and telecommunications, precisely those economic sectors in which WTO agreements have been completed.[1]

Global competitiveness may therefore be incompatible with market competition in a given nation. As a rule of thumb, many economists agree that if 40% of a given market is controlled by four firms, the market is no longer competitive. Such concentration is not at all unusual in the agricultural sector: in the U.S. Midwest, four firms control well over 40% of the trade in most major agricultural commodities,[2] and the top four agrochemical corporations reportedly control over 55% of the global market.[3] Nonetheless, in 1999 the U.S. government approved the merger of the two largest international grain trading corporations, Cargill and Continental Grain, in spite of explicit concerns that the merger might result in monopsony power [4] (over 80% of international trade is controlled by only ten firms[5]). Ironically, the U.S. assistant attorney general in charge of re-

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[1]L. Wallach and M. Sforza, *Whose Trade Organization?: Corporate Globalization and the Erosion of Democracy*, Washington, DC: Public Citizen, 1999.

[2]W. Hefferman, Report to the National Farmers Union: Consolidation in the Food and Agriculture System, Columbia: University of Missouri, 1999. Note that it can be very difficult to assess market concentration.

[3]Action Group on Erosion, Technology and Concentration, Concentration in Corporate Power: The Unmentioned Agenda, ETC communique #71, 2001. Online: http://www.rafi.org/documents/com_globlization.pdf.

[4]Monopoly is a single seller, and monopsony is a single buyer. In this case, the U.S. Department of Justice was more concerned about prices to farmers than prices to consumers.

[5]G. van Empel and M. Timmermans, "Risk Management in the International Grain Industry." In *Commodities Now,* December 2000. Online http://www.commodities-now.com/cnonline/dec2000/article3/a3-pl.shtml.

viewing the merger reportedly suggested that even more consolidation would be required to maintain the competitiveness of American agriculture in global markets.[6]

If mergers are indeed required for firms to remain "competitive" in a global economy, will this lead to a more efficient allocation of resources? As Chicago School economist and Nobel laureate Ronald Coase pointed out, firms are islands of central planning in a sea of market relationships.[7] The islands of central planning become larger and larger relative to the remaining sea of market relationships as a result of mergers. More and more resources are allocated by within-firm central planning, and less by between-firm market relationships. Of the 100 largest economic organizations, more than half are corporations. One-third of the commerce that crosses national boundaries does not cross a corporate boundary; it is an intra-firm, nonmarket, transfer. Is there any reason that central planning should work better for a large corporation than it does for a nation?

Patents and Monopolies

At the global scale, intellectual property rights are tied to trade. Why? It is hard to trade property if the legal right to the property is in dispute. As a result, the Agreement on Trade Related Aspects of Intellectual Property (TRIPs) requires all WTO signatories to protect intellectual property rights (IPR) for 20 years,[8] with violators subject to trade sanctions and fines.

In chapter 10, we discussed two major inefficiencies associated with patents. First, information is a nonrival good, and making it excludable leads to inefficiencies. Second, patents are nothing more than temporary monopolies, and monopolies are inherently inefficient. We also discussed the counterargument for patents, that unless we provide the economic incentive of monopoly ownership for a significant period of time (20 years, they suggest), little new knowledge and innovation will be forthcoming.

THINK ABOUT IT!

Do you remember why it is inefficient to make nonrival goods excludable? Do you remember why monopolies are inefficient?

Although patents have existed in England since the seventeenth century, in the United States and France since the 1790s, and in most of Europe since the 1880s, international patents are a fairly recent

[6]Reported in A. Cockburn, and J. St. Clair, "How Three Firms Came to Rule the World." In *Counterpunch*, November 20, 1999. Online: www.counterpunch.org. A competitive market is defined as one with enough firms that all firms are price takers and none are price makers. Mergers in highly concentrated markets by definition make those markets less competitive, not more.

[7]R. Coase, The Nature of the Firm, *Economica* 4(16): 386–405 (1937).

[8]Wallach and Sforza, op. cit.

phenomenon. They have been practical only since the International Patent Institute was established at the Hague in 1947. Until the 1980s, patents played a relatively unimportant role in international commerce. Empirically it seems to be the burst of inventions that has stimulated demand for greater patent protection, more than vice versa.

In 1790 Samuel Slater, the "Father of American Industry," essentially stole the design for the first American textile factory from Richard Arkwright, the English industrialist.[9] Currently corporations and individuals from developed countries own 97% of all patents, and the WTO provides mechanisms for enforcing these patents globally. Is this likely to encourage or discourage a new Samuel Slater, a father of industry in a country that truly needs it? At the very least, it is difficult to argue that technology has foundered so much since the 1970s that we need a substantial expansion of patent protection under the WTO to stimulate its advance.

THINK ABOUT IT!

Make a list of the most important contributions, discoveries, or inventions in your major field of study. How many of them were motivated by patentability of intellectual property? There might be interesting differences between fields of study.

As economist Joseph Schumpeter emphasized, being the first with an innovation already gives one a temporary monopoly by virtue of novelty. In his view, these recurring temporary monopolies were the source of profit in a competitive economy whose theoretical tendency is to compete profits down to zero. This is the very condition of economic efficiency—why thwart it?

This is not to say that we should abolish all intellectual property rights. Such an action would create more problems than it would solve. But we should certainly begin restricting the domain and length of patent monopolies rather than increasing them so rapidly and recklessly. And we should become much more willing to share knowledge. Shared knowledge increases the productivity of all labor, capital, and resources—things that are inherently scarce, rival, and excludable. Knowledge is not inherently scarce and is the quintessential public good—nonrival and nonexcludable—even though patents make it artificially excludable.

One important and practical policy implication of these considerations is that international development aid should consist far more of freely shared knowledge, and far less of foreign investment and interest-bearing loans. Let's recall the following words from John Maynard Keynes, one of the founders of the Bretton Woods Institutions:

[9]The Story of Samuel Slater, Slater Mill Historic Site, Website, http://www.slatermill.org/html/history.html.

Box 18-1 Discoveries Not Motivated by Patent Monopoly Profits

No doubt many important inventions have been stimulated by patent rights. However, the heliocentric view of the universe, gravity, the periodic table of elements, electromagnetic theory, as well as the laws of optics, mechanics, thermodynamics, and heredity were all discovered without the benefit of intellectual property rights and the profit motive. Mathematics has been called the language of the universe. Where would our technology be without it? While no culture has ever allowed a patent on mathematical theorems, mathematicians keep producing new ones.[a] Nor has anyone ever had intellectual property rights to the English language, or to fire, the wheel, or money. Yet all these things somehow came into being. The invention of the shipboard chronometer, necessary for navigational calculation of longitude, was stimulated by a one-time prize, not a 20-year patent monopoly. Even economists work long and hard to produce economic theories that are not patentable. Alfred Marshall got no royalties from users of supply and demand and elasticity. J. R. Hicks expected no royalties, and got none, for developing the IS-LM model, and the proper concept of income.

In fact, it is difficult to name a single modern invention that does not depend on ideas freely shared from their first conception. While patent rights have stimulated important inventions, that is less than half the story. In the words of Lawrence Lessig:

> *Free resources have always been central to innovation, creativity and democracy. The roads are free in the sense I mean; they give value to the businesses around them. Central Park is free in the sense I mean; it gives value to the city that it centers. A jazz musician draws freely upon the chord sequence of a popular song to create a new improvisation, which, if popular, will itself be used by others. Scientists plotting an orbit of a spacecraft draw freely upon the equations developed by Kepler and Newton and modified by Einstein. Inventor Mitch Kapor drew freely upon the idea of a spreadsheet—VisiCalc—to build the first killer application for the IBM PC—Lotus 1-2-3. In all of these cases, the availability of a resource that remains outside of the exclusive control of someone else—whether a government or a private individual—has been central to progress in science and the arts. It will also be central to progress in the future.*[b]

[a] *D. S. Evans, Who Owns Ideas? The War Over Global Intellectual Property,* Foreign Affairs *81(6): 160–166 (November/December 2002).*

[b] *L. Lessig,* The Future of Ideas: The Fate of the Commons in a Connected World, *New York: Random House, 2001. Online: http://music.barrow.org/2002/Q3/free/page3.htm.*

> *I sympathize therefore, with those who would minimize, rather than those who would maximize, economic entanglement between nations. Ideas, knowledge, art, hospitality, travel—these are the things which should of their nature be international. But let goods be homespun whenever it is reasonably and conveniently possible; and, above all, let finance be primarily national.*[10]

Externalizing Costs

As we also discussed in Chapter 10, a necessity for efficient markets is that producers pay the costs of production, and they produce to the point where marginal costs are just equal to marginal benefits. This condition is not met when externalities exist, and there are several ways in which economic globalization increases the quantity and severity of externalities.

The goal of the WTO is to increase economic growth and the transport of goods between countries, and both growth and fossil fuel–based transportation are accompanied by significant externalities. At the national level, laws exist to reduce externalities, but the WTO has the power to challenge these laws, and the ability to enforce its decisions. While technically countries are allowed to pass environmental legislation, the WTO frequently declares such laws barriers to trade, and even the threat of a WTO ruling can deter lawmakers. For example:

1. Challenged by Venezuela, the United States was forced to allow the import of gasoline that does not comply with U.S. Clean Air Act regulations.
2. The WTO ruled against the U.S. Endangered Species Act, which prohibits the import of shrimp from countries that do not mandate turtle excluder devices.
3. Under GATT, Mexico won a decision against the U.S. Marine Mammal Protection Act's dolphin-safe tuna provision. Under threats by Mexico of WTO enforcement action, President Clinton and Vice President Gore took the lead in getting Congress to weaken the offending law.
4. Australia's law strictly limiting the import of raw salmon, designed to prevent domestic stocks from contamination with foreign bacteria, was declared a barrier to trade. Scientific studies showed that the risk of infection existed, but the WTO ruled that the probability of infection also had to be shown to justify import restrictions.[11]

[10] J. M. Keynes, "National Self-Sufficiency." In Donald Muggeridge (ed.), *The Collected Writings of John Maynard Keynes*, vol. 21. London: Macmillan and Cambridge University Press, 1933.

[11] Unfortunately, many of the ecosystem goods and services threatened by economic growth and free trade are characterized by uncertainty and ignorance, in which case by definition probabilities of possible outcomes cannot be determined.

In each of these cases, the overturned regulations had been put in place by relatively democratic governments to reduce negative externalities affecting nonmarket goods and services. A number of other environmental laws are currently threatened by the WTO.[12]

Standards Lowering Competition

At the same time that the WTO makes it difficult for countries to legislate against externalities, the need to compete for market share reduces national incentives to legislate against externalities in what is known as standards-lowering competition (a race to the bottom). The country that does the poorest job of internalizing all social and environmental costs of production into its prices gets a competitive advantage in international trade. More of world production shifts to countries that do the poorest job of counting costs—a sure recipe for reducing the efficiency of global production. As uncounted, externalized costs increase, the positive correlation between GDP growth and welfare disappears, or even becomes negative. Recall the prescient words of John Ruskin: “That which seems to be wealth” becomes in verity the “gilded index of far reaching ruin.” The first rule of efficiency is “count all the costs,” not “specialize according to comparative advantage.”[13]

One way to confront the race-to-the-bottom tendency is to argue for harmonization of cost-accounting standards across countries. This is certainly logical and in line with global integration. If all countries internalized external social and environmental costs to the same degree, there would be no incentive for mobile capital to move to the country that did not internalize these costs because such countries would not exist. It would be hard to negotiate such a global harmonization agreement. There are, in fact, good reasons why different countries have different cost-accounting practices. In any case, it might be argued that countries should measure costs according to their own values, not “international standards.” The traditional comparative advantage argument is compatible with each country’s measuring costs as it pleases. As we saw in Table 17.1, a-units and b-units, which might reflect totally different theories of value, need never be compared in the comparative advantage system. But with capital mobility and absolute advantage comes the necessity to compare a-units to b-units, and the problem of standards-lowering competition to attract mobile capital.

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[12]All examples are from Wallach and Sforza, op. cit.

[13]J. Ruskin, “Unto This Last.” Online: http://www.nalanda.nitc.ac.in/resources/english/etext-project/economics/Ruskin.pdf.

Box 18-2 Wealth, Power, and Efficiency

Another potential problem with economic globalization is an increase in rent-seeking behavior in the form of lobbying by large corporations and wealthy individuals to influence policy.[a] If large corporations are "islands of central planning," showing less growth than smaller corporations probably as a result of the inefficiencies of central planning, why do they continue to thrive? One possibility is that the concentrated wealth of large corporations readily translates into political power, and large corporations can use this power to promote policies that allow them to thrive in spite of any inefficiencies inherent to centrally planned economies.

Large corporations routinely help politicians set not only domestic rules of the game but also international rules. The trade advisor to President Nixon was a vice president of Cargill, the world's largest grain exporter. President Reagan relied on a Cargill employee to draft the U.S. agricultural proposal for GATT.[b] President Clinton appointed Monsanto CEO Robert Shapiro as a trade representative to the WTO. President George W. Bush relied on Enron CEO Kenneth Lay when designing energy policies. The WTO meetings in Seattle in 1999 were primarily sponsored by large corporations. Can we be sure that this advice and assistance come with no strings attached?

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[a] *Recall that rent is profit over and above the normal profits of operation.*

[b] *K. Lehman and A. Krebs, "Control of the World's Food Supply." In Mander and Goldsmith, eds.* The Case Against the Global Economy, *San Francisco: Sierra Club Books, J. Mander and E. Goldsmith (1996).*

Specialization and Diminished Well-Being

If an important goal of economic systems is to increase human well-being, then the specialization accompanying globalization is another source of inefficiency. Free trade and free capital mobility increase pressures for specialization according to competitive (absolute) advantage. Therefore, as noted earlier, the range of choice of ways to earn a livelihood becomes greatly narrowed. In Uruguay, for example, everyone would have to be either a shepherd or a cowboy in conformity with the dictates of competitive advantage in the global market. Everything else should be imported in exchange for beef, mutton, wool, and leather. Any Uruguayan who wants to play in a symphony orchestra or be an airline pilot should emigrate.

Most people derive as much satisfaction from how they earn their income as from how they spend it. Narrowing that range of choice is a welfare loss uncounted by trade theorists. Globalization assumes either that

emigration and immigration are costless or that narrowing the range of occupational choice within a nation is costless. Both assumptions are false.

While the range of choice in earning one's income is ignored by trade theorists, the range of choice in spending one's income receives exaggerated emphasis. For example, the United States imports Danish butter cookies and Denmark imports U.S. butter cookies. The cookies cross each other somewhere over the North Atlantic. Although the gains from trading such similar commodities cannot be great, trade theorists insist that the welfare of cookie connoisseurs is increased by expanding the range of consumer choice to the limit.

Perhaps, but could not those gains be had more cheaply by simply trading recipes? One might think so, but recipes (trade-related intellectual property rights) are the one thing that free traders really want to protect.

Sustainable Scale

While globalization advocates laud efficiency, their goal is not simply more efficient production of what we now produce, but rather ever greater production. If the sole purpose or even the major priority of international trade is to promote growth in GDP with little or no attention paid to scale, in the long run, a "successful" trade regime will lead us beyond the sustainable scale for the global economy. This is true no matter how efficient the allocation of resources between countries. It should already be clear that greater externalities and standards lowering competition pose threats to sustainable scale.

Two other issues bear mentioning. First, the integration into one global system gives us only one chance to see if the system works—we cannot learn from our mistakes. Second, the negative environmental impacts of our consumption may occur in another country, where they are that much more likely to be ignored.

Learning from Our Mistakes

In the past, numerous civilizations have crumbled as they have surpassed ecological barriers. Examples are the civilization on Easter Island, the Mayan empire, and the early civilizations of the Fertile Crescent. Fortunately, these were isolated incidents in which only the local carrying capacity was overwhelmed, and today they can serve as examples of mistakes we cannot afford to make. However, as trade expands, local limits to scale become less relevant and global limits more so. While trade may decrease the chances of surpassing sustainable scale in any one area, it also means that if we do surpass it, we are more likely to do so for the planet as a whole. Consequently, it becomes more difficult to learn from

our mistakes as we go. Thus, globalization requires us to get it right the first time.

Out of Sight, Out of Mind

Even if globalization did not lead countries with high environmental standards to lower them, international trade can make it easier to ignore the costs of economic growth. In recent decades, as the most developed nations saw their environments deteriorating, they passed laws to control some types of pollution and resource depletion. To some extent this led to greater efficiency, decreased consumption of polluting products, and improved technologies for controlling pollution, but in many cases it seems to have led to the relocation of polluting and resource extracting industries to countries without such laws.[14] The environments in the developed countries improved at the expense of the poorer countries. With the spatial connection between economic growth and environmental damage severed, many people seem to believe that the causal connection has been severed as well. Indeed, many economists now claim that environments in the developed countries improved precisely because of economic growth.

In reality, the net impact of relocation of environmentally damaging industries on scale can be highly negative. For example, when Australia's wet tropical rainforests were declared a World Heritage site (largely due to pressure from environmentalists) and the region's reasonably well-managed logging operations were shut down, total timber consumption in Australia did not decrease. Instead, Australia has substituted its own tropical timber supply with timber from tropical countries with worse logging practices. The net outcome is likely a greater loss of ecosystem services worldwide.

Similar, and perhaps more threatening, is the relocation of waste from toxic industries. Russia is currently discussing the establishment of nuclear and toxic waste processing facilities. These facilities will allow the overdeveloped countries to reduce further degradation of their environments.[15] However, they may well result in less careful waste disposal than would have occurred in the country where the waste originated. In this case, simply transporting the wastes would increase the danger of negative environmental impacts.

We already know that markets fail to signal many environmental costs. In a democracy, when people are exposed to environmental externalities,

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[14]D. Rothman, Environmental Kuznets Curves—Real Progress or Passing the Buck? A Case for Consumption-Based Approaches, *Ecological Economics* 25: 177–194 (1998).

[15]Overdeveloped countries are defined as those whose level of per-capita resource consumption is such that if generalized to all countries could not be sustained indefinitely. See H. Daly, *Beyond Growth: The Economics of Sustainable Development*, Boston: Beacon Press, 1996.

they can signal their preferences through political institutions. If people in the developed democracies export their wastes or environmentally damaging industries to less democratic countries, we lose this signal of environmental scarcity. The first rule of cost internalization is to internalize costs to the firm that generates them. If we fail to do this, then we must at least internalize costs to the country under whose laws the firm was operating when it generated the externalities. The second rule could be enforced by prohibiting the export of toxic waste.

Positive Aspects of Trade with Respect to Scale

We have thus far presented an incomplete picture of the impacts of globalization on scale. In the absence of international trade, appropriate scale (in terms of economic activity and human populations) would be determined at the national level and by the most limiting factor. For example, one country might have abundant agricultural land but inadequate mineral resources. In other countries, scale might be limited by land area, mineral resources, or fuel supplies, in yet others by waste absorption capacity, rainfall, or agricultural productivity. International trade can help alleviate the most limiting constraints on scale within each country. If international trade suddenly ceased, some countries would find themselves well beyond sustainable scale, and even beyond desirable scale in the short term.[16]

Efforts to sustain a high standard of living for too large a population with limited resources would no doubt force some countries to liquidate natural capital—for example, extend the agricultural frontier to lands that cannot sustain it, or burn their forests to meet energy needs. Other countries might be forced to mine low-quality, highly polluting fossil fuels.

International trade can help sustain larger populations with higher levels of material consumption than isolated national economies alone could sustain. Unfortunately, this happy outcome is likely only if sustainable scale and equitable distribution are explicit and are the principal goals of international trade. It is more likely to occur under internationalization than globalization.

Just Distribution

Finally, we turn to the impact of globalization on distribution. Proponents of globalization claim that it will bring about "a world free of poverty" (the professed goal of the World Bank). Will globalization achieve this goal?

[16]Surpassing sustainable scale means that the sustaining ecological system must eventually collapse, and surpassing short-term desirable scale means that the costs of additional growth outweigh the benefits for the current generation.

Next we examine the empirical evidence and explore some theoretical reasons that trade liberalization might not reduce poverty. We conclude with a brief look at the most important of commodities—food.[17]

Absolute Disadvantage

In the presence of capital mobility, money will logically flow to wherever there is an absolute advantage of production. The world's poorest countries may be poor precisely because they are inefficient at producing nearly everything. If this is true, then the countries most likely to suffer from globalization are in fact the very poorest.

Does this conclusion have any empirical support? According to the IMF, most developing countries have failed to raise their per-capita incomes toward those of industrial countries. United Nations Development Programme statistics show that in the three decades prior to 1996, the share of income received by the world's poorest 20% fell from 2.3% to 1.4%, while the share going to the world's richest 20% increased from 70% to 85%. Still, these statistics refer only to relative income, not absolute income. The world's poorest 20% have seen some gains in income over the past 40 years.[18] Globalization on a significant scale, however, is a fairly recent phenomenon. What has happened to the poorest of the poor more recently?

Using the World Bank's Global Development Network Growth Database,[19] we calculated the average increase in per-capita income from 1989 to 1999 for the 15 poorest countries at the start of that period[20] for which data are available.[21] All of these countries are sub-Saharan African nations, and with the exception of natural resource endowments in some of them, they have few absolute advantages in global competition. We found that real per-capita income in these countries (as measured by GDP) ac-

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[17]In spite of the recent trend toward privatization of water, we do not consider water a commodity. Water is not produced for sale; it is produced by nature. Privatization is basically an enclosure of the commons, and a very inefficient one since it invariably creates a monopoly. (How many different water companies can you buy water from? How many water lines lead into your house?)

[18]E. Kapstein, "Distributive Justice as an International Public Good: A Historical Perspective." In I. Kaul, I. Grunberg, and M. Stern, eds. *Global Public Goods: International Cooperation in the 21st Century*. New York: Oxford University Press, 1999.

[19]W. Easterly and M. Sewadeh. Online: http://www.worldbank.org/research/growth/GDNdata.htm.

[20]Per-capita incomes are measured in real GDP in 1989. We conservatively used 1989 instead of 1999, as the later date would automatically select for countries that were less likely to have experienced growth.

[21]Ethiopia, Chad, Democratic Republic of the Congo, Niger, Burkina Faso, Malawi, Burundi, Tanzania, Uganda, Mali, Comoros, Central African Republic, Myanmar, Togo, Madagascar, and Guinea-Bissau.

tually *decreased* by an average of 5.5% over that period. Concerned that war in two of these countries might bias results, we looked at the 15 poorest countries that had not experienced war.[22] We still found that these countries suffered on average a 3.2% *decrease* in income. In contrast, the wealthiest 15 countries in 1989 experienced an average increase in per-capita income of 15.5% by 1999. In absolute terms, the same amount of money required to boost per-capita income in the U.S. by 1% would double the per-capita income of the 24 poorest countries (for which we have data) in the world today.

If we lived on an infinite planet in which one person's consumption had no impact on anyone else, and if human nature did not lead us to measure our wealth in comparison to others, it would make no difference to the poor countries what happened in the wealthy ones. The fact is, however, that we do live on a finite planet. The increase in income in the wealthy countries is fueled by nonrenewable resource consumption (including nonsustainable depletion of potentially renewable resources), which means that these resources are not available for future improvements in the well-being of the poorest. And resource use generates a corresponding amount of waste and accompanying damage to public good ecosystem services that would otherwise benefit these poorest countries.

This observation draws our attention to a fact otherwise obscured by the data. Most of these poorest countries were involved in international trade in the one area where they might have an absolute advantage: the extraction and export of natural capital. The revenue they received from both export and domestic sales of these resources counted as part of their income. Without this revenue, income as measured by GDP would have fallen even more. Yet as you will recall, we earlier defined income as the amount you can consume in one period without affecting your ability to consume in subsequent periods. Thus, revenue from nonrenewable natural resource extraction cannot be counted entirely as income, and the situation of these poorest countries is even worse than it appears.

Of course, the evidence presented here says nothing conclusive about globalization. One could argue, as economists often do, that the problem was insufficient liberalization. Perhaps things would have been even worse in the poorest countries without globalization. What happened in the countries that most avidly pursued economic liberalization?

Many countries have shown periods of economic growth as their economies have liberalized. For example, Argentina was considered one of the most avid converts to economic liberalization in Latin America in recent years, and in real terms, per-capita income increased by over 40%

[22]We dropped Ethiopia and the Democratic Republic of the Congo and replaced them with Zambia and Guinea.

from 1990 to 1998.[23] Yet between 1987 and 1997, the income gap between the richest 10% and the poorest 10% increased from 15 to 1 to 24.8 to 1. The proportion of people in urban areas living below poverty fell for the first few years of the 1990s, coinciding with the control of inflation, but from 1993 to 1998, poverty rates increased from 27.3% to 35.8%. With the collapse of the economy in December 2001, poverty rates soared to over 50%. For Latin America as whole, trade liberalization has been accompanied by an increasing income gap between the richest 10% and the poorest from 37 to 1, already the worst in the world, to 48 to 1. Poverty rates in Mexico, Argentina, and Venezuela, among others, have soared over the last 7 years.[24] Just as importantly, the growth that has occurred there has been marked by intense instability resulting from the volatility of international capital flows, as we will discuss below.

While there is no proof that globalization has been the culprit in this decline, there is even less evidence that globalization is a cure for poverty.

Standards Lowering Competition and Labor

We discussed above how countries pressured by global competition may ignore external costs to the environment in a race to the bottom. To remain competitive, countries may similarly need to accept or even promote lower labor costs.

In the United States and Europe, an implicit social contract has been established to ameliorate industrial strife between labor and capital. Specifically, a just distribution of income between labor and capital has been taken to be one that is more equal within these countries than it is for the world as a whole. Global integration of markets necessarily abrogates that social contract. There is pressure on American and European wages to fall because labor is relatively much more abundant globally than nationally. By the same logic, returns to capital in these countries should increase because capital is relatively more scarce globally than nationally. This could lead U.S. income distribution, already approaching Third World ranges of inequality, to become even more unequal. Theoretically, one might argue that wages would be bid up in the rest of the world. But the relative numbers make this a bit like saying that, theoretically, when I jump off a ladder, gravity not only pulls me to the ground, it also moves the ground toward me.

In general, if a country pursues economic growth by developing the ex-

[23]World Bank's Global Development Network Growth Database. GDP in nominal dollars increased by 260%.

[24]A. Faiola, "Argentina's Lost World: Rush into the New Global Economy Leaves the Working Class Behind," *Washington Post*, December 8, 1999. Argentina's poverty rate has skyrocketed since the collapse of its economy in December 2001.

port sector, it must be able to sell what it produces on the highly competitive global market, and costs must be kept low. In a world of mobile capital, absolute advantage in production is what counts. Most less-developed countries (LDCs) do not have advanced technologies that can lower production costs, a well-developed infrastructure that can lower transportation costs, or institutions that make investments particularly safe. Instead, they have two sources of absolute advantage: abundant labor and (in some cases) abundant natural resources.

For export-oriented industrial production, the only absolute advantage LDCs generally have is the low wages they can offer. Until these countries develop some other source of absolute advantage, wages and benefits must be kept down to remain competitive on the world market. This does little to help alleviate poverty, and it frequently requires the suppression of labor rights.

What happens if instead a country seeks to industrialize to serve the needs of the domestic market? Obviously the prerequisite for this to occur is that a domestic market actually exists. A market can only exist if there is purchasing power, and purchasing power requires wages. This is why Henry Ford (no friend of labor) chose to pay his workers $5.00/day (at the time an exceptionally high wage)—he wanted them to be able to afford the cars they were producing. Thus, for LDCs, a focus on liberal international trade will tend to push wages down, while a focus on production for the domestic economy may tend to push wages up.

When confronted with this argument, people might point to the Asian Tigers (Taiwan, Korea, Singapore, Hong Kong, and more recently, Thailand and Malaysia). These countries, like Japan, pursued export-oriented industrialization and saw dramatic increases in their standards of living. Yet on closer examination, the historical record of the Asian Tigers actually bolsters the argument for developing the domestic market. First, these nations are characterized by highly protectionist policies and a high degree of government intervention, not by open markets. More to the point, their initial successes were greatly facilitated by strong domestic markets. In Korea, Taiwan, and Japan, agrarian reform preceded industrialization. In these predominantly agrarian societies, the transfer of land to small farmers allowed the farmers to accumulate and spend the surplus they generated. As Dr. Sun Yat-Sen stated in the Son Mm Chu-I (the Three Principles of the People), "industrialization should follow, not precede, the building up of the internal capacity to consume." Successful land reform in Taiwan doubled the purchasing power of the farmer at a time when Taiwan was an agricultural economy.[25] In their early

[25]Quoted in F. Harrison, *Five Lessons for Land Reformers: The Case of Taiwan*. Reprinted from *Land & Liberty* May–June (1980). Online: http://www.cooperativeindividualism.org/harrison_taiwan_land_reform.html.

industrialization efforts, the Asian Tigers focused on import-substituting industrialization (ISI). Captive markets allowed them to develop the skills necessary for global competition.[26]

On the other hand, production for the domestic economy can have a negative impact on real wages as well. If a country currently importing industrial goods decides instead to replace them, the new industries will have a hard time competing against established producers. Thus, ISI generally requires tariffs and quotas on imports. Such tariffs will stimulate demand for domestic goods (benefiting the producer) but drive up the price of imports in order to make the import substitute more competitive, and lower real wages.

In terms of distribution relative to export-oriented economies, however, this impact may not be as dire as it seems. First, export-oriented countries typically undervalue their currencies to make exports cheap and imports expensive, so there may be little difference between ISI and export promotion with respect to consumer prices. In addition, the easiest goods to produce are often the cheapest, those purchased by the working masses (soap, aspirin, matches, etc.). With simple production technologies, the LDCs are not at a serious disadvantage when producing these goods, and tariffs can be kept quite low. Luxury goods, on the other hand, tend to be more technologically sophisticated and may require higher tariffs. However, it is the wealthier classes that purchase these goods, and they can better afford to pay the tariffs.

As the industry develops, two things happen. First, efficiency should improve, and tariffs can be reduced—especially if the producers know that tariffs will be reduced and therefore have an imperative to improve efficiency. Second, any market based solely on a wealthy minority will quickly become saturated. Further industrialization will depend on larger markets, which can be created through higher wages for the labor force. Once industrial capacity is well developed and production techniques have been refined, a country may be able to compete on the export market without forcing wages down to the global minimum. This is essentially the strategy that was pursued by the newly industrialized Asian economies.[27]

It is also worth remembering that in the 1960s and 1970s, the countries engaged in ISI often showed the highest growth rates, and they were touted as examples for others to follow. Brazil's economic growth under this strategy was considered miraculous. Economic wisdom is surprisingly fickle.

Probably the most important lesson to take from this discussion is that

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[26]E. Vogel, *The Four Little Dragons: The Spread of Industrialization in East Asia*, Cambridge, MA: Harvard University Press, 1991.

[27]Ibid.

one size never fits all. Different cultures are likely to require different approaches to development, and what works under one set of global economic conditions might fail miserably under another. Economists would do well to keep this in mind.

Food Security and Free Trade in Agriculture

Potentially the most serious source of unfairness in the liberalization of trade is the threat it poses to food security. "Free" trade in food threatens security in two important ways. First, the market system provides goods and services to those who have the money to purchase them. If in the future the WTO or other international agreements succeed in liberalizing trade in agriculture, poor citizens of LDCs will be competing with the rich citizens of ODCs (overdeveloped countries) for food. In his groundbreaking study of famines, Amartya Sen has shown that famines are generally the result of a lack of entitlements to food rather than a lack of food itself.[28] In the market economy, this simply means a lack of money to purchase food, even when actual supplies are abundant. The situation can occur because of unemployment or a decrease in the value of the goods some group produces relative to food. In the presence of international trade, the domestic sector must bid against the rest of the world for food purchases. If the economy suffers a recession or there is a currency devaluation, local ability to purchase food decreases relative to global ability, and food may be exported even as the local population starves. Clearly, international trade can be critical in addressing famines that are caused by food availability decline, but only if countries have the resources to purchase that food. If agricultural markets are completely liberalized, it is easy to imagine Western nations importing food for their cattle from nations suffering famine.

The fact that farmers are typically the most disadvantaged group in many LDCs brings a second source of unfairness if agriculture is liberalized. LDC costs of agricultural production tend to be higher than those of large agro-industrial farms in ODCs (in part because so many negative externalities of industrial agriculture are not internalized). This means that trade liberalization will often decrease prices for food in LDCs. While lower food prices may help the urban poor and wage earners, it can also cause lower incomes and declines in welfare for the poorest group, namely farmers. Low food prices reduce incentives for domestic agriculture. Theoretically, under trade liberalization, these poor farmers should be able to grow cash crops for export. Unfortunately, cash crops often

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[28] A. Sen, *Poverty and Famines: An Essay on Entitlement and Deprivation*, 6th ed. New York: Oxford University Press, 1992.

require higher levels of inputs and are far riskier than traditional food crops that have been bred for millennia to minimize the risk of failure. While average returns over several years may be higher with cash crops even with more frequent failures, people do not eat "on average"—they eat every day.

Box 18-3 Public Law 480 and Food Security

If one country becomes dependent on others for food supply, they run serious risks to their autonomy. For example, the U.S. Public Law 480 provides food at subsidized cost to LDCs. While nominally a gesture of benevolence, American politician Hubert Humphrey once said in reference to this law: "I have heard . . . that people may become dependent on us for food. I know that was not supposed to be good news. To me that was good news, because before people can do anything they have got to eat. And if you are looking for a way to get people to lean on you and to be dependent on you, in terms of their cooperation with you, it seems to me that food dependence would be terrific."[a]

Secretary of Agriculture Earl Butz also referred to food as a weapon and "one of the principal tools in our negotiating kit."[b] Understandably, countries that come to depend on food imports may not share Humphrey's enthusiasm for that dependence.

[a] *Sen. Hubert H. Humphrey, in naming P. L. 480 the "Food for Peace" program,* Wall Street Journal, *May 7, 1982.*

[b] *USDA Secretary Earl Butz, 1974 World Food Conference in Rome.*

Summary Points

We are better served by a process of internationalization in which countries are free to act on their own information to address local problems of scale and distribution (areas where the market manifestly fails) in a culturally sensitive manner. We must also carefully analyze the actual and potential impacts of globalization on scale, distribution, and efficiency.

Evidence suggests that globalization may be undermining the conditions required for efficient market allocation, by creating fewer, bigger firms, more negative externalities, and more monopolies on nonrival information. More negative externalities and increased economic growth, coupled with a limit on the national ability to regulate externalities, is a threat to sustainable scale. Empirical evidence also suggests that globalization under the principle of absolute advantage may simply reinforce existing patterns of winning and losing, leading to even greater concentration of wealth, both within and between countries.

BIG IDEAS to remember

- Perfect competition vs. mergers, patents, and transnational corporations
- Trade vs. environment in the WTO
- Standards-lowering competition
- Wealth and power
- Specialization and welfare
- Trade and scale
- Distribution and globalization
- Food security and international trade